

TRANSLATION

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>0000055035</b>	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. <b>PCT/EP2004/012177</b>	International filing date (day/month/year) <b>28.10.2004</b>	Priority date (day/month/year) <b>31.10.2003</b>
International Patent Classification (IPC) or national classification and IPC <b>A61 L15/48, A61 L15/60, A61 L15/00</b>		
Applicant <b>BASF AKTIENGESELLSCHAFT</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.	
2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.	
3. This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>2</u> sheets, as follows: <input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))  _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).	
4. This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application	

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/012177

Box No. I

Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_ which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-23 \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* 1-16 \_\_\_\_\_ received by this Authority on 05.08.2005 with letter
- nos.\* \_\_\_\_\_ received by this Authority on of 03.08.2005
- ☐ the drawings:
- sheets \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (specify): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (specify): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (specify): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (specify): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-16	YES
	Claims		NO
Inventive step (IS)	Claims	1-16	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-16	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
1. This report makes reference to the following cited documents and passages indicated in the search report:			
D1: US-B1-6 592 768			
D2: PATENT ABSTRACTS OF JAPAN, Vol. 2000, No. 19 & JP 2001 046423 A			
D3: US 2002/128618 A1			
D4: EP-A-1 072 630			
D5: US-A-5 847 031			
D6: EP-A-0 705 643			
D7: WO 95/17455 A			
1.1 D1 discloses Medi-Gel 100, a superabsorber containing hydrophobic silicon dioxide.			
1.2 D2 discloses absorbers containing hydrophobic zeolites.			
1.3 D3, D4 and D6 disclose absorbers that are treated with hydrophobic silicic acid.			
1.4 D5 discloses absorbers that are produced in			

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
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the presence of hydrophobic silicic acid and then treated with aluminum salts.

- 1.5 D7 discloses absorbers with a floating behavior between 35 and 80%.

2. The present application meets the requirements of PCT Article 33(1), because the subject matter of claims 1-16 is novel within the meaning of PCT Article 33(2).

Claim 1 relates to a partially neutralized, re-treated hydrogel with a defined floating behavior which, according to table 1, exists only within a narrow range. Since the applicant has shown that none of the documents D1-D7 discloses such hydrogels, the subject matter of claims 1-2 and of claims 3-16 (production method and uses) appears to be novel.

3. The subject matter of claims 1-16 involves an inventive step within the meaning of PCT Article 33(3).

D7 is regarded as the prior art closest to the subject matter of claim 6. It discloses absorbers with floating behaviors that differ by their production as well as by their floatability after swelling.

Therefore, the problem to be solved by the

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present invention can be regarded as that of providing alternative production methods and absorbers with an alternative floating behavior.

It was shown in the application that the hydrogels subjected to multiple treatments (examples 4, 5, and 26-29) have the desired characteristics.

Since none of the documents D1-D7 renders obvious such floating behavior, the subject matter of claims 1-16 appears to be inventive.